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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket. No. 041082-0113

Applicant: Aser ROTHSTEIN *et al.*

Title: SELF-ALIGNING PEPTIDES MODELED ON HUMAN
ELASTIN AND OTHER FIBROUS PROTEINS

Application No.: 09/964,662

Filing Date: 09/28/2001

Examiner: Unassigned

Art Unit: Unassigned

STATEMENT TO SUPPORT FILING AND SUBMISSION
IN ACCORDANCE WITH 37 C.F.R. 1.821-1.825

Commissioner for Patents
Washington, D.C. 20231

Sir:

In connection with a Sequence Listing submitted concurrently herewith, the undersigned Hereby states that:

1. the submission, filed herewith in accordance with 37 C.F.R. 1.821(g), does not include new matter;
2. the content of the attached paper copy and the attached computer readable copy of the Sequence Listing, submitted in accordance with 37 C.F.R. 1.821(c) and (3), respectively, are the same; and
3. all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

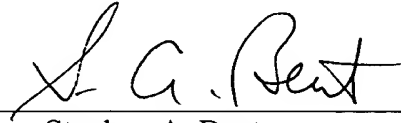
States Code and that such willful false statements may jeopardize the validity of the application or any patent resulting therefrom.

Respectfully submitted,

Date 17 December 2001

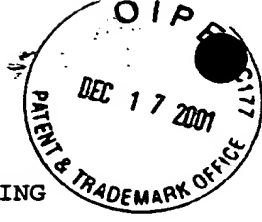
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#3



SEQUENCE LISTING

<110> ROTHSTEIN, ASER
KEELEY, FRED
ROTHSTEIN, STEVEN

<120> SELF-ALIGNING PEPTIDES MODELED ON HUMAN ELASTIN
AND OTHER FIBROUS PROTEINS

<130> 041082/0110

<140> 09/340,736
<141> 1999-06-29

<150> 08/911,364
<151> 1997-08-07

<150> 60/023,552
<151> 1996-08-07

<160> 11

<170> PatentIn Ver. 2.1

<210> 1
<211> 731
<212> PRT
<213> Homo sapiens

<400> 1

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Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly
35 40 45
Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala
50 55 60
Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Tyr Lys Ala Ala
65 70 75 80
Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly Gly Leu Gly
85 90 95
Val Ser Ala Gly Ala Val Val Pro Gln Pro Gly Ala Gly Val Lys Pro
100 105 110
Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val Tyr Pro Gly Gly Val
115 120 125
Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val Leu Pro Gly Val Pro
130 135 140

Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly Val Gly Gly Ala Phe
 145 150 155 160
 Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly Pro Gln Pro Gly Val
 165 170 175
 Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu Pro Gly Gly Tyr Gly
 180 185 190
 Leu Pro Tyr Thr Thr Gly Lys Leu Pro Tyr Gly Tyr Gly Pro Gly Gly
 195 200 205
 Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro Thr Gly Thr Gly Val
 210 215 220
 Gly Pro Gln Ala Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys Phe
 225 230 235 240
 Gly Ala Gly Ala Ala Gly Val Leu Pro Gly Val Gly Gly Ala Gly Val
 245 250 255
 Pro Gly Val Pro Gly Ala Ile Pro Gly Ile Gly Gly Ile Ala Gly Val
 260 265 270
 Gly Thr Pro Ala Ala Ala Ala Ala Ala Ala Ala Lys Ala Ala
 275 280 285
 Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly Gly Pro Gly Phe Gly
 290 295 300
 Pro Gly Val Val Gly Val Pro Gly Ala Gly Val Pro Gly Val Gly Val
 305 310 315 320
 Pro Gly Ala Gly Ile Pro Val Val Pro Gly Ala Gly Ile Pro Gly Ala
 325 330 335
 Ala Val Pro Gly Val Val Ser Pro Glu Ala Ala Ala Lys Ala Ala Ala
 340 345 350
 Lys Ala Ala Lys Tyr Gly Ala Arg Pro Gly Val Gly Val Gly Gly Ile
 355 360 365
 Pro Thr Tyr Gly Val Gly Ala Gly Gly Phe Pro Gly Phe Gly Val Gly
 370 375 380
 Val Gly Gly Ile Pro Gly Val Ala Gly Val Pro Gly Val Gly Gly Val
 385 390 395 400
 Pro Gly Val Gly Gly Val Pro Gly Val Gly Ile Ser Pro Glu Ala Gln
 405 410 415
 Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Val Gly Thr Pro Ala
 420 425 430
 Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala Ala Gln Phe Gly Leu Val
 435 440 445

Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly
 450 455 460
 Val Ala Pro Gly Val Gly Leu Ala Pro Gly Val Gly Val Ala Pro Gly
 465 470 475 480
 Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Ala Ile Gly Pro Gly
 485 490 495
 Gly Val Ala Ala Ala Lys Ser Ala Ala Lys Val Ala Ala Lys Ala
 500 505 510
 Gln Leu Arg Ala Ala Ala Gly Leu Gly Ala Gly Ile Pro Gly Leu Gly
 515 520 525
 Val Gly Val Gly Val Pro Gly Leu Gly Val Gly Ala Gly Val Pro Gly
 530 535 540
 Leu Gly Val Gly Ala Gly Val Pro Gly Phe Gly Ala Gly Ala Asp Glu
 545 550 555 560
 Gly Val Arg Arg Ser Leu Ser Pro Glu Leu Arg Glu Gly Asp Pro Ser
 565 570 575
 Ser Ser Gln His Leu Pro Ser Thr Pro Ser Ser Pro Arg Val Pro Gly
 580 585 590
 Ala Leu Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Val Pro Gly
 595 600 605
 Val Leu Gly Gly Leu Gly Ala Leu Gly Gly Val Gly Ile Pro Gly Gly
 610 615 620
 Val Val Gly Ala Gly Pro Ala Ala Ala Ala Ala Ala Lys Ala Ala
 625 630 635 640
 Ala Lys Ala Ala Gln Phe Gly Leu Val Gly Ala Ala Gly Leu Gly Gly
 645 650 655
 Leu Gly Val Gly Gly Leu Gly Val Pro Gly Val Gly Gly Leu Gly Gly
 660 665 670
 Ile Pro Pro Ala Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Gly
 675 680 685
 Leu Gly Gly Val Leu Gly Gly Ala Gly Gln Phe Pro Leu Gly Gly Val
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<220>

<223> Description of Artificial Sequence: Synthetic
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Val	Pro	Gly	Val	Gly	Gly	Val	Pro	Gly	Val	Gly	Gly	Val	Pro	Gly	Val	20	25	30	
Gly	Ile	Ser	Pro	Glu	Ala	Gln	Ala	Ala	Ala	Ala	Ala	Lys	Ala	Ala	Lys	35	40	45	
Tyr	Gly	Val	Gly	Thr	Pro	Ala	Ala	Ala	Ala	Ala	Lys	Ala	Ala	Ala	Lys	50	55	60	
Ala	Ala	Gln	Phe	Gly	Leu	Val	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	65	70	75	80
Gly	Val	Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Leu	Ala	Pro	85	90	95	
Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Val	100	105	110	
Ala	Pro	Ala	Ile	Gly	Pro	Glu	Ala	Gln	Ala	Ala	Ala	Ala	Ala	Lys	Ala	115	120	125	
Ala	Lys	Tyr	Gly	Val	Gly	Thr	Pro	Ala	Ala	Ala	Ala	Ala	Lys	Ala	Ala	130	135	140	
Ala	Lys	Ala	Ala	Gln	Phe	Gly	Leu	Val	Pro	Gly	Val	Gly	Val	Ala	Pro	145	150	155	160
Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Leu	165	170	175	
Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	Gly	Val	Ala	Pro	Gly	Val	180	185	190	
Gly	Val	Ala	Pro	Ala	Ile	Gly	Pro	195	200										

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

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<210> 4
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 4
Lys Ala Ala Ala Lys
1 5

<210> 5
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<220>
<223> Description of Artificial Sequence: Synthetic peptide

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1 5

<210> 6
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 6
Val Pro Gly Val Gly
1 5

<210> 7
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<223> Description of Artificial Sequence: Synthetic peptide

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Val Pro Gly Gly
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<210> 8
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 <212> PRT
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 8

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 1 5 10 15

Gly Leu Gly Tyr Gly Gly Leu Gly Tyr Gly Gly Leu Gly Tyr
 20 25 30

<210> 9
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 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
 MFU-3 polypeptide

<400> 9

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 1 5 10 15

Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val Gly
 20 25 30

Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Lys Ala Ala Lys Tyr
 35 40 45

Gly Val Gly Thr Pro Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala
 50 55 60

Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val Gly
 65 70 75 80

Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro Gly
 85 90 95

Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala
 100 105 110

Pro Ala Ile Gly Pro
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<223> Description of Artificial Sequence: Synthetic
MFU-4 polypeptide

<400> 10

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Phe Pro Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly
 1             5             10             15

Val Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val
          20             25             30

Gly Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys
          35             40             45

Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys
 50             55             60

Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val
 65             70             75             80

Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro
          85             90             95

Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val
          100             105             110

Ala Pro Ala Ile Gly Pro
          115

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<211> 199

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
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<400> 11

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 1             5             10             15

Pro Gly Val Gly Gly Val Pro Gly Val Gly Gly Val Pro Gly Val Gly
          20             25             30

Ile Ser Pro Glu Ala Gln Ala Ala Ala Ala Ala Lys Ala Ala Lys Tyr
          35             40             45

Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Lys Ala Ala Ala Lys Ala
 50             55             60

Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly Val Gly
 65             70             75             80

Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala Pro Gly
          85             90             95

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Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala	100	105	110
Pro Ala Ile Gly Pro Glu Ala Gln Ala Ala Ala Ala Lys Ala Ala	115	120	125
Lys Tyr Gly Val Gly Thr Pro Ala Ala Ala Ala Lys Ala Ala Ala	130	135	140
Lys Ala Ala Gln Phe Gly Leu Val Pro Gly Val Gly Val Ala Pro Gly	145	150	155
Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly Leu Ala	165	170	175
Pro Gly Val Gly Val Ala Pro Gly Val Gly Val Ala Pro Gly Val Gly	180	185	190
Val Ala Pro Ala Ile Gly Pro	195		